



4fw 1656

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: AF-0022

Inventors: Walker et al.

Serial No.: 10/510,557

Filing Date: October 7, 2004

Examiner: Robinson, Hope A.

Customer No.: 26259

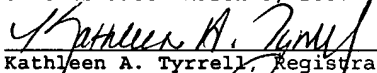
Group Art Unit: 1656

Confirmation No.: 4185

Title: Antifreeze Proteins for Inhibition of
Clathrate Hydrate Formation and
Reformation

I, Kathleen A. Tyrrell, Registration No. 38,350,
certify that this correspondence is being deposited
with the U.S. Postal Service as First Class mail in
an envelope addressed to the Commissioner for Patents
P.O. Box 1450, Alexandria, VA 22313-1450

On this date: March 6, 2007


Kathleen A. Tyrrell, Registration No. 38,350

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R.
§§1.97-1.98, information relating to the above-identified
application is hereby disclosed. Inclusion of information in
this statement is not to be construed as an admission that this
information is material as that term is defined in 37 C.F.R.
§1.56(b).

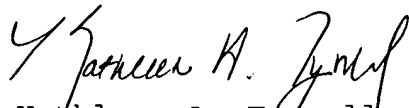
- (XX) In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.
- () In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:
- () Certification in Accordance with §1.97(e) is attached hereto; or
- () Authorization to charge Deposit Account No. 50-1619 the fee of \$180.00 as set forth in §1.17(p) is provided.
- () In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(I)(1).
- (XX) Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed herewith with the exception of U.S. Patents and U.S. Published Applications.

() In accordance with §1.98(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified) are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior application Serial No. _____, filed _____, for which a claim for priority under 35 U.S.C. §120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-1619. This form is submitted in duplicate.

(XX) All listed references are in the English language.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Kathleen A. Tyrrell", is written over the printed name.

Kathleen A. Tyrrell
Registration No. 38,350

Date: March 6, 2007

Licata & Tyrrell P.C.
66 E. Main Street
Marlton, New Jersey 08053

(856) 810-1515



PTO/SB/08A (09-06)

Approved for use through 03/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/510,557
Filing Date	October 7, 2004
First Named Inventor	Walker, et al.
Art Unit	1656
Examiner Name	
Attorney Docket Number	AF-0022

Sheet 1 of 3

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	CA	US- 5,460,728	Oct. 24/95	Klomp, et al.	
	CB	US- 5,648,575	Jul. 15/97	Klomp, et al.	
	CC	US- 5,972,679	Oct. 26/99	Griffith	
	CD	US- 6,090,917	Jul. 18/00	Lillford, et al.	
	CE	US- 6,096,867	Aug. 1/00	Byass, et al.	
	CF	US- 6,156,880	Dec. 5/00	Lillford, et al.	
	CG	US- 6,162,789	Dec. 19/00	Lillford, et al.	
	CH	US- 6,348,569	Feb. 19/02	Walker, et al.	
	CI	US- 6,392,024	May 21/02	Graham, et al.	
	CJ	US- 6,905,605	Jun. 14/05	Klomp	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ ~Number ⁴ ~Kind Code ⁵ (if known)	MM-DD-YYYY			
	CK	JP 2005089353English Translation	Apr. 7/05			
	CL	WO 00/16619	Mar. 30/00			
	CM	WO 99/00493	Jan. 7/99			
	CN	WO 95/17579	Jun. 29/95			
	CO	WO 93/25798	Dec. 23/93			

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/510,557
		Filing Date	October 7, 2004
		First Named Inventor	Walker, et al.
		Art Unit	1656
		Examiner Name	
Sheet 2 of 3	Attorney Docket Number	AF-0022	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	DA	Doucet et al., Eur. J. Biochem. 269:38-46, 2002	
	DB	Edwards, Ann. N.Y. Acad. Sci. 715:543-544, 1994	
	DC	Englezos, Trans. IChemE. 70:43-47, 1992	
	DD	Graham et al., Nature 388:727-728, 1997	
	DE	Klomp et al., "Low Dosage Hydrate Inhibitors: (How) Do They Work?", IBC Conference Proceedings, October 1997	
	DF	Knott, "Holding Hydrates at Bay", Oil On Line, Industry News, 2001 (http://www.oilonline.com/news/features/oe/20010201.holding_.25.asp)	
	DG	Kuiper et al., Biophysical J. 81:3560-3565, 2001	
	DH	Lederhos et al., Chem. Eng. Sci. 51:1221-1229, 1996	
	DI	Liou et al., Nature 406:322-324, 2000	
	DJ	Makogon et al., J. Crystal Growth 179:258-262, 1997	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/510,557
		Filing Date	October 7, 2004
		First Named Inventor	Walker, et al.,
		Art Unit	1656
		Examiner Name	
Sheet 3	of 3	Attorney Docket Number AF-0022	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	DK	Mehta, et al., Ann. N.Y. Acad. Sci. 912:366-373, 2000	
	DL	Montfort et al., Ann. N.Y. Acad. Sci. 912:753-765, 2000	
	DM	Patterson et al., J. Comp. Physiol. 142:539-542, 1981	
	DN	Rodger, Ann. N.Y. Acad. Sci. 912:474-482, 2000	
	DO	www.netl.doe.gov/publications/facsheets/program/prog019.pdf February 2001	
	DP	Svartaas et al., Ann. N.Y. Acad. Sci. 912:744-752, 2000	
	DQ	Tyshenko et al., Nature Biotechnol. 15:887-890, 1997	
	DR	Worrall et al., Science 282:115-117, 1998	
	DS	Zeng, et al., Can. J. Phys. 81:17-24, 2003	
	DT	Zeng, et al., J. Am. Chem Soc. 128:2844-2850, 2006	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.